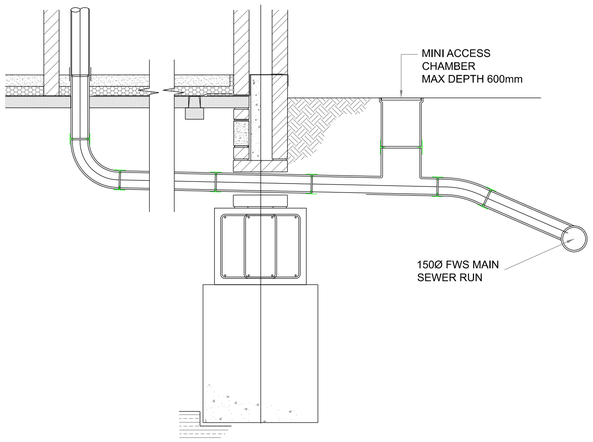
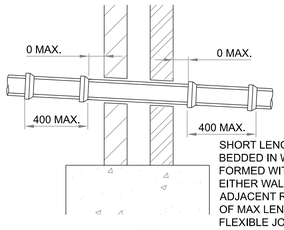


PIPELINE UNDER TYPICAL BUILDING SLAB

CONCRETE ENCASE WHERE COVER TO UNDERSIDE OF FLOOR SLAB IS LESS THAN 300 mm

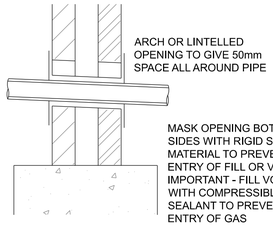


SOIL PIPE \ FOUL CONNECTION

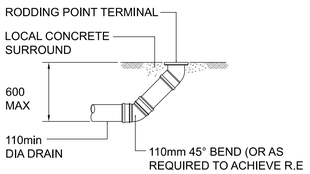


SHORT LENGTH OF PIPE BEDDED IN WALL, JOINTS FORMED WITHIN 150mm OF EITHER WALLFACE. ADJACENT ROCKER PIPES OF MAX LENGTH 600mm WITH FLEXIBLE JOINTS.

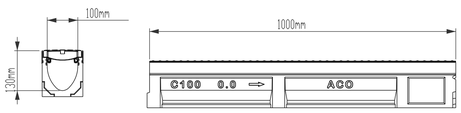
OR

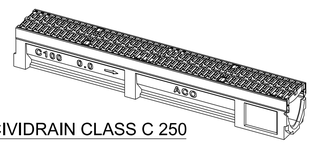


PIPEWORK PENETRATING WALL DETAIL



RODDING EYE





ACO CIVIDRAIN CLASS C 250

CBR (%)	SUB-BASE ONLY	CAPPING OPTION	
		CAPPING	SUB-BASE
2.0 & BELOW	-	600	150
2.5	350	400	150
3.0	300	350	150
4.0	270	300	150
5.0	250	250	150

TABLE 1

NOTE: IF SUB-GRADE IS FROST SUSCEPTIBLE, MINIMUM CONSTRUCTION DEPTH TO BE 450mm

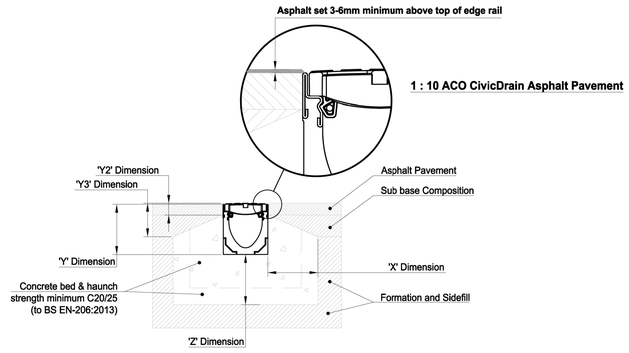
CBR (%)	MINIMUM THICKNESS (mm) OF SUB-BASE (CONSOLIDATED IN ACCORDANCE WITH MCHW VOLUME 1 CLAUSE 801, TABLE 8/1)	
	WITHOUT GEOTEXTILE UNDERNEATH	WITH GEOTEXTILE UNDERNEATH
2.0 & BELOW	N/A	300
2.0-3.0	325	225
3.0.-5.0	250	150
5.0-7.0	150	-
7.0-20.0	100	-

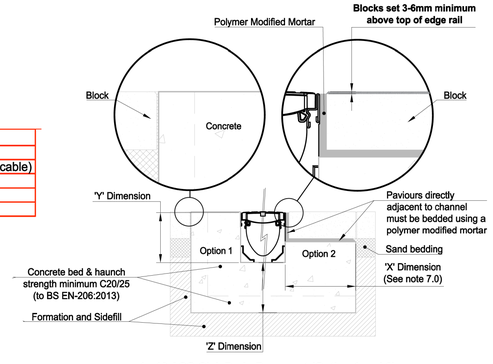
TABLE 2

FROM NHBC STANDARDS CHAPTER 9.2 MINIMUM SUB-BASE THICKNESS FOR PAVED AREAS

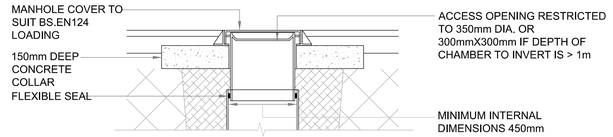
Load Class		C 250
Minimum Dimensions (mm)	X	150
	Y	Full Channel Height (Less Y2 where applicable)
	Z	150
Maximum Dimensions (mm)	Y2	35
	Y3	60

Not suitable for carriageway of roads or industrial areas.

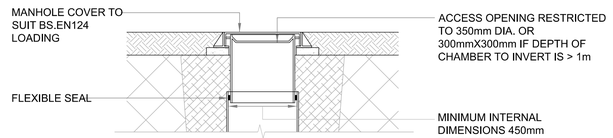




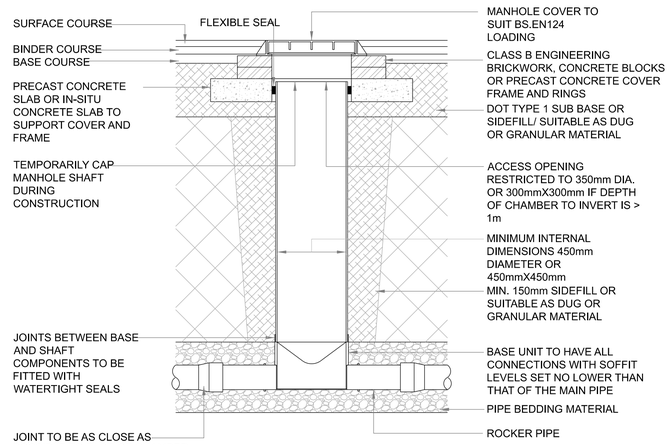
1 : 10 ACO CivicDrain Pavement (Option 1 and 2)



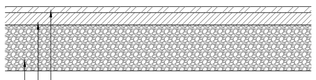
SITED IN DOMESTIC DRIVEWAYS OR FOOTWAYS



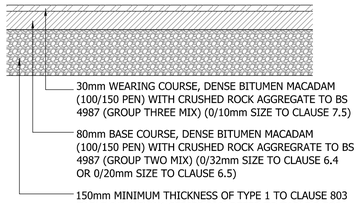
SITED IN DOMESTIC GARDENS



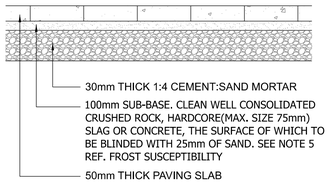
TYPICAL INSPECTION CHAMBER DETAIL



SINGLE BITMAC DRIVES AND PATHS



SHARED BITMAC DRIVES AND PATHS

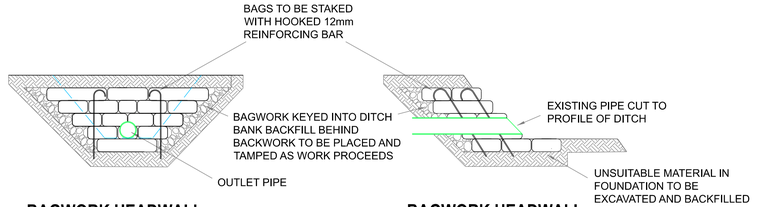


PAVING SLABS TO PATIOS, REAR GARDENS & ACCESS PATHS

BAGS SHALL BE OF HESSIAN OR CANVAS AND SHALL BE OF A SIZE TO PROVIDE A WALL THICKNESS OF 500mm.

CONCRETE BAGWORK SHALL BE TO CLAUSE 519 AND BE THREE QUARTER FILLED WITH 25mm SLUMP ST4 CONCRETE IMMEDIATELY PRIOR TO PLACING WITH THE ENDS SEWN.

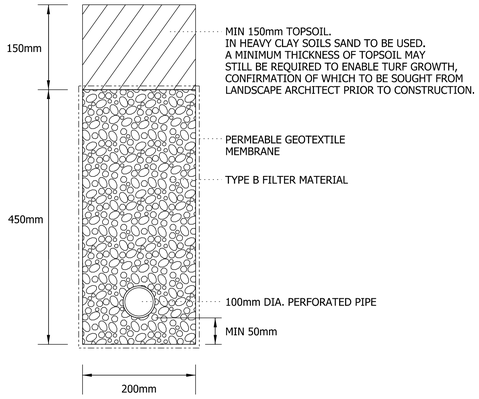
THE BAGS SHALL BE PLACED IN A MODIFIED FLEMISH BOND SO AS TO 'BREAK JOINT' WITH THE MOUTHS AWAY FROM THE SURFACE AND BE TAMPED INTO POSITION TO FORM A RECTANGULAR BLOCK



BAGWORK HEADWALL ELEVATION

BAGWORK HEADWALL SECTION

FILTER DRAIN BAGWORK HEADWALL



FILTER DRAIN

SAFETY, HEALTH AND ENVIRONMENTAL

In addition to the hazards, risks normally associated with the type of work detailed on this drawing, note the following significant risks and information.

Construction:

1. The Contractor should make all necessary enquiries and take all necessary measures to identify the location of existing utilities running through the site. This includes the foul sewer located to the north and rising main to the middle of the site crossing east to west.

2. Unacceptable concentrations of arsenic have been located within the site which will require further testing to determine the extent and appropriate licenced disposal.

For information relating to end use, maintenance, demolition, see the health and safety file.

It is assumed that all works will be carried out by a competent Contractor, where appropriate, to an approved method statement.

NOTES

1. Contractors must check all dimensions on site. Only figured dimensions are to be worked from. Discrepancies must be reported to the Architect or Engineer before proceeding.
© This drawing is copyright.

2. Until technical approval has been obtained from the relevant authorities, all drawings are issued as preliminary and not for construction. Should the Contractor commence site work prior to approval being given it is entirely at his own risk.

3. Woods Hardwick cannot accept liability for any discrepancies in terms of coordinates or any other information deciphered from dwg's.

4. Where the tests indicate that the sub-grade is frost susceptible a suitable capping layer should be included below the sub-base, to a depth that will ensure that the construction will not be affected by frost heave (minimum 450mm overall construction thickness). A capping layer can be any material not susceptible to frost heave. Soils that are not susceptible are sands and rocks.

5. When laid to either 90 or 45 degrees herringbone pattern then the edge perimeter to be laid with one single row of stretcher bond set parallel to the edge restraint. Where block pavers are laid abuttingdrainage channels, gulley grates and the like, the upper surface of the block pavers shall be set between 3 and 6mm above the grating.

6. Manufacturer's declared value markings W3 and S4 are acceptable if W3 is 1.0kg/m2 or less and S4 is 45 or more based on 'c scale unit' (with regard to abrasion, Class A2, no test result is greater than 23mm; and Class A1 = no performance determined) .

7. Formation to parking areas to be proof-rolled. Any soft spots en-counted are to be removed & replaced with granular Type 1 material laid in layers not exceeding 225mm thick fully compacted.

8. Compaction to be in accordance with DMRB document Tables 6/1 to 8/1. 2000kg/m2 vibrating plate compactor to pass 6 times to achieve adequate compaction on 150mm thick hardcore - 4 passes for 100mm hardcore).

9. All pipes running through walls to have at least 50mm clearance all round and the opening masked with rigid sheet material.

10. All private drainage works to be constructed in accordance with the latest edition of the Building Regulations Part H (Drainage & Waste Disposal) and to BSEN752 (Building Drainage).

11. Blockwork supplier to be consulted throughout the construction of the porous paving systems to ensure compliance with their standards.

12. The Contractors attention is drawn to the requirement for the porous pavement formation to be underlain with an impermeable membrane (Terram 1000 or similar approved).

13. Balloon leaf guards to be fitted to all gutters

14. Channel drains to be installed as per manufacturers recommendations, including concrete bed and surround, sloping invert where there is no surface fall, and silt trap unit on the end.

REV	DESCRIPTION	DRN	CHD	DATE
E	ACO INSTALLATION DETAILS ADDED	CLS	JGF	06-08-20
D	FILTER DRAIN BAGWALL DETAIL AMENDED AS PER DETAIL PROVIDED BY ADC ENGINEER	CLS	JGF	12-05-20
C	PERMEABLE PAVING DETAILS MOVED TO DRAWING 921. FILTER DRAIN & BAGWORK HEADWALL DETAIL ADDED.	JGF	JGF	20-04-20
B	ADDITIONAL NOTES ADDED	CLS	JGF	03-04-20
A	UPDATED DRIVE DETAILS	CLS	JGF	07-08-19

■ PRELIMINARY ☐ INFORMATION ☐ TENDER

☐ CONSTRUCTION ☐ AS BUILT

SCALE	N.T.S @ A1	DATE	JULY 2019
DRAWN	SD	CHK	JGF
DRAWING NO.	17748-BARN-5-920	REV	E
TITLE	YAPTON ROAD BARNHAM		
DETAILS	PRIVATE CONSTRUCTION DETAILS		

Woods Hardwick
Architecture | Engineering | Planning | Surveying

BEDFORD : HEAD OFFICE
15-17 Goldington Road
Bedford MK40 3NH
T: +44 (0) 1234 268862

BIRMINGHAM
Fort Dunlop, Fort Parkway
Birmingham B24 9FE
T: +44 (0) 121 6297784

ONLINE: mail@woodshardwick.com | woodshardwick.com

PLEASE CONSIDER THE ENVIRONMENT BEFORE PRINTING THIS DRAWING